

Grade Level	Course Name	Syllabus Name	Standard Description	Standard Name
Grade 9	Mathematics	Algebra	Basic operations	Rational and irrational numbers, calculation of the real numbers
Grade 9	Mathematics	Algebra	Basic operations	Square roots
Grade 9	Mathematics	Algebra	equations	Fractional expressions
Grade 9	Mathematics	Algebra	variables	Systems of first degree equations in two unknowns
Grade 9	Mathematics	Algebra	Statistics - Analysing data	Statistics
Grade 9	Mathematics	Algebra	Proportionality	Linear functions and proportionality
Grade 9	Mathematics	Algebra	Trigonometry	Trigonometry in right triangle

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Standard Code	Description
ch1	Definition of a rational number.
	Definition of an irrational number.
	Operation on real numbers.
	Power of a real number.
	Insertion of a rational.
	Scientific notation.
ch2	Definition of square roots.
	Properties.
	Solving equations in the form of $x^2 = a$.
	Expand and reduce.
	Rationalization.
	Comparison of radicals.
ch3	Fractional expressions in the form of $\frac{P(x)}{Q(x)}$
	with its domain of definition.
	Reducing a fractional expression.
	Solving the equation $\frac{P(x)}{Q(x)} = 0$
	Expand and reduce.
	Factorization
ch4	Linear equations and system of two linear equations.
	Methods for solving a system of two equations in two unknowns.
	Particular systems.
	Changing variables.
	Problems.
ch5	Statistical vocabulary.
	Graphical representation.
	Mean.
ch6	Situation of direct and indirect proportionality.
	Linear functions.
	Problems.
ch7	Trigonometric lines in a right triangle.
	Generalization.

	Fundamental relations.
	Trigonometric ratios of certain particular angles.
	Problems.
	Slope of a line.
ch8	Definition of a tangent to a circle.
	Relative position of a line and a circle.
	Construction of a tangent to a circle.
	Properties.
ch9	Thales' theorem.
	Enlargement and reduction.
	Converse of Thales' theorem.
	Fourth proportional.
ch10	Definition.
	Properties.
	Ratio of similitude.
	Metric relation in a right triangle.
	Center of gravity.
ch11	Definition of a vector.
	Equal vectors.
	Images of some figures by translation.
	Properties of a translation.
	Sum of two vectors.
	Coordinates of a vector.
	Coordinates of the midpoint of a segment.
ch12	Forms of the equation of a line.
	Point on a line.
	Particular lines.
	Graphing a line.
	Slope of a line passing through two points.
	Distance between two points.
	Finding the equation of a line.
	Parallel line.
	Perpendicular lines.

	Intersection of two lines.
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